

# VERIFICATION OF STANDARDS OF CAPACITY

## Department of Commerce and Labor

### BUREAU OF STANDARDS

Washington

1903  
BUREAU CIRCULAR NO. 4

December 10, 1903.

Under the provisions of an act of Congress approved March 3, 1901, establishing the Bureau of Standards, this Bureau is authorized, among other things, to compare capacity measures used in scientific work, manufacturing, and commerce with the standards of the Government. For the present the work will be limited to capacity measures within the following limits: 1 fluid ounce to 5 gallons,  $\frac{1}{2}$  pint to  $\frac{1}{2}$  bushel, dry measure, or 1 milliliter to 10 liters, cubic-foot standards, and chemical measuring apparatus.

#### FEES.

The following schedules of fees for the verification of such apparatus have been established:

##### SCHEDULE 21.—PRECISION CAPACITY STANDARDS.

(a) For work of the highest scientific precision where special precautions have to be observed and much time is required, special fees will be charged, depending upon the nature of the apparatus, the degree of precision, and the time required.

##### SCHEDULE 22.—ORDINARY CAPACITY STANDARDS.

The measures covered by the following schedule are such as are used by chemists, sealers of weights and measures, and for the highest grade of commercial work. Under this heading are included substantial metallic measures, provided with ground-glass covers, flasks made of glass, and similar capacity measures. Fees are as follows:

(a) Measures between the limits of $\frac{1}{2}$ dry pint and $\frac{1}{2}$ bushel, between 1 fluid ounce and 5 gallons, and metric measures between 1 centiliter and 20 liters, each.....	\$2.00
(b) Glass flasks from 1 liter to 10 liters, each.....	1.00
(c) Glass flasks between 10 cubic centimeters and 1 liter, including the latter, each .....	.75
(d) Cubic-foot standards for testing gas meters, each.....	2.00

Measures of capacity not provided for above may also be submitted, the fees for which will depend upon the time required for the test.

REMITTANCES.—Fees should be sent with the request for test in accordance with the above schedule, and should be remitted by money order drawn to the order of the "Bureau of Standards." Delays in forwarding fees involve corresponding delays in the return of articles tested, as the articles are held until the fees due thereon have been paid.

#### SHIPPING DIRECTIONS.

Instruments should be securely packed in cases or packages which may be used in returning them to the owner. In all cases transportation charges are payable by the party desiring the test, and should be prepaid.

ADDRESS.—Articles should be addressed "Bureau of Standards, Department of Commerce and Labor, Washington, D. C.," and not to members of the Bureau staff. Delays incident to other forms of address will thus be avoided. Articles delivered in person or

by messenger should be left at the office of the Bureau and should be accompanied by a written request for the verification.

CERTIFICATE.

The certificate furnished by the Bureau of Standards will contain the following data:

- (a) Description and identification marks of article.
- (b) Name of party for whom comparison is made.
- (c) Temperature and other conditions of the test.
- (d) Corrected values or table of corrections desired.
- (e) Date of certification.
- (f) Seal of the Bureau and signature of the Director.
- (h) Special remarks where necessary.

---

It is the desire of the Bureau to cooperate with manufacturers, scientists, and others in bringing about more satisfactory conditions relative to weights and measures in the broader meaning of the term, and to place at the disposal of those interested such information relative to these subjects as may be in its possession.

All communications should be addressed "Bureau of Standards, Department of Commerce and Labor, Washington, D. C."

S. W. STRATTON,  
*Director.*

Approved:  
GEO. B. CORTELYOU,  
*Secretary.*

